

# ECHO IRELAND

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Irish Radio Transmitters Society  
November/December 2001



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**Deadline for next edition  
January 31st**

**February 24th  
Phoenix Euro Rally  
in Coolmine, Dublin**

**March 2/3rd  
IRTS AGM  
in Knock, Co. Mayo**

**April 7th  
Limerick Rally  
Jury's Inn, Limerick.**

*Best wishes  
to all members and their  
families for Christmas and  
may you all have a happy  
and peaceful 2002.*



## Limerick Radio Club

Members of Limerick Radio Club pictured during a recent visit to the club by IRTS President Dave Moore EI4BZ.

Seated L. to R. Liam Mangan EI4GB, John Edgeworth EI6IW, Paul Kirkby EI6FE, Tony Liddy EI9IL, Alan Walsh EI5FRB

Standing L. to R. John Phelan, Alan Cronin EI8EM, Tony Condon EI2AW, Peter Enright EI3JA, Brian Toner EI9AL, Maurice Donworth EI3JF, John Doherty EI5FOB

## Contents

Society Officers 2001/2002	2
Thoughts from the Editor..	3
On the Air with Anthony EI2HY	4
Simple, cheap test equipment with Richard G8SHE,	6
The night before Christmas, a poem by N8IWK	7
Club Round Up - news from Cork, Fingal, Tipperary and South Dublin	8
My New Shack, an occasional column by Ger EI8HT	9
Letters Page	10
The Worked EI Counties Award	10
EI Ham Buy and Sell Forum on line	10
Jamboree On The Air 2001	11
John Corless reports on his visit to Leicester Pickets Lock	12
Contest Calendar and the annual VHF/UHF Squares table	13
Cork Gaol and Radio Museum	14
Contest Corner with EI4BZ	15
Members Advertisements	15
The OQ Award and Marconi Centenary in Newfoundland	16
What are they on about now? A look at committee activities by John EI7IQ	17
South Dublin Spring Challenge	18
Reading the Mail - a look at the Incoming Bureau with EI2CL	18
Welcome to the World above 1200MHz with Dermot EI2AK	19
Knock 2002 - Mayo Rally and IRTS AGM	20

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## From the Editor.....

Welcome to another edition of Echo Ireland, the sixth of the year.

As another year ends, I would like to pay tribute to all the voluntary workers who keep the work of the Society ticking over. Have a look at the list on the opposite page and you will find in excess of thirty different individuals listed. My thanks to you all.

Not listed, but also playing an invaluable role are the newsreaders who week in, week out, are the public image of the Society. We are very lucky with the quality of our newsreading.

### AGM 2002

We will be having a very early AGM in the coming year. It will be held on the 9th weekend of 2002 in Knock and is being hosted by the Mayo Radio Experimenters Network.

We missed out on the social side last year due to foot and mouth, so please make an effort to get to next year's event. It is not too early to be booking your accommodation! The Mayo boys are pulling out all the stops to make this the best ever AGM weekend so be there!

### ODTR

Regretfully, at the time of going to press (December 11th) no definite progress can be reported with the new licensing measures. We can appreciate that the office of the DTR is a very busy place but we have been promised the new regulations since before the Office was even set up. We have been made false promises on too many occasions but at this stage it is difficult to know how to proceed. It is frustrating to say the least! We can only live in hope.

### New Year Resolutions

This is the time of the year when we look ahead and resolve to do things differently in the coming year.

New licences are being issued regularly, in the main through the good work of clubs and groups who run classes. We should be grateful to all who give of their time to promote the hobby. In many cases, the new amateur goes away and promptly loses touch with the group that helped him get on the air.

We must realise that passing the examination is only the start of the amateurs education. I am amazed at the number of people I have come across who do not possess even the basic books or who never read magazines. The number of times one hears outlandish statements made on air due to lack of knowledge is worrying.

Healthy vibrant clubs can help overcome this problem.

This is where the newer and indeed older licensees can gain the experience and knowledge required.

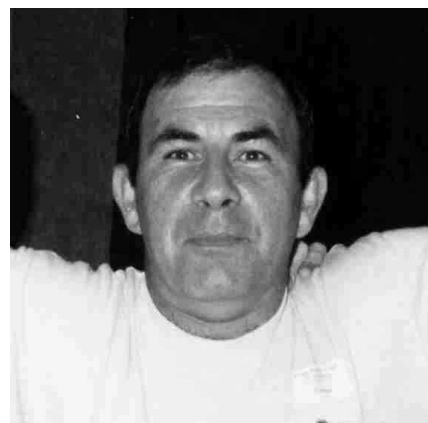
Most people today are not in a position to set up big stations. However, clubs can and some do. This is where all the skills can be learned and practised. I wish that more clubs would get outdoors and give their members practical experience.

That is why field days are held. You are not expected to be a world beating contender. Don't worry about the number of QSOs you make. It is enough that you get the experience of erecting and running a station from scratch.

There are so many other activities groups can get involved in.

Try something different in 2002. If you need help, please ask.

If you need someone to give a club talk, let us know.



### Billy EI7CQB

Apologies to Billy EI7CQB who was wrongly attributed the callsign EI5CQB on page 19 in the last issue of the Newsletter.

## I.R.T.S. Radio News Service

Input for the radio news  
should be sent to:

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or  
Cyberis@e-merge.ie

**Deadline**  
2100 on Tuesdays  
for the following Sunday



**Well known WAI operators Jim EI8GS, Brian G0NSL and Gerry EI2CH got together at the Leicester Rally**



# On The Air

With Anthony O'Rourke EI2HY

Anthony O'Rourke EI2HY,  
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ei2hy@iol.ie

Welcome to another On The Air column, the last one for 2001.

It seems that I've started all the articles with reports of solar activity and this issue is no different hi!

A large X-Class Flare erupted on November 4<sup>th</sup> and hurled a large Coronal Mass Ejection towards Earth. The resulting Geomagnetic Storm which began at 0150utc on November 6<sup>th</sup> caused a visible Aurora which could be seen all over Ireland, the parts that had clear skies that is. We had low ground hugging fog here in Cork city for the entire duration of it! The Planetary K-index rose to an 8 for several of the 3-hour periods while the Planetary A-index rose to a very severe storm level of 112. This of course led to terrible HF conditions but gave most of Europe a spectacular visual Aurora display down as far south as Sicily in Italy.

The previous weekend had the CQ WW SSB Contest, which started off with fantastic conditions on the Saturday, but Sunday saw the A-index rise to 40.

This led to some absorption of HF signals, not that you'd think it by listening to the bands, but at one 3-hour stage the K-index had risen to 6.

Here is a brief explanation of just what these figures mean.

Basically the K-index is a measure of the variations in the Earth's magnetic field and these figures are taken every three hours using instruments called Magnetometers.

Figures range from 0 (quiet) to 9 (severe storm) and here's where the maths come into it; at each Earth observatory the difference in K figures can vary, so each observing station has a "conversion" chart to read off the A-index figure which corresponds to the K-index figure.

For example most people would be using the official 3 hour figures from Boulder, Colorado which is fine except that we have a source a lot closer to home here in Europe. The observatory in Kiel Germany provides a handy service on 10.144MHz using a Morse code (remember Morse?) beacon which runs continuously.

At Kiel a K figure of, say, 2 would be a corresponding A of 5 using the quasi-logarithmic scale for Kiel. So if the K stayed at 2 for each of the eight 3-hour

periods in a day then you would have eight periods of an A of 5 totalling an A of 40 which is divided by 8 (because of the 8 x 3-hour readings) to leave you with the A-index for that day being 5. Of course its not as simple as that as with each three hour period the K can be anywhere from 0 to 5 and the A-index is linear with a scale of 0 (quiet) up to 400 (severe storm).

Normally an A index of 15 or below or the K at 3 or lower are ideal for HF Conditions.

As luck would have it, just before the start of the CQ WW CW contest, an M9.9 Flare erupted at 2330utc on November 22<sup>nd</sup> and the resulting Coronal Mass Ejections (CME's) impacted our Planet's Magnetic Field at 0530utc early on the Saturday morning of the contest. The Geomagnetic Storm raged for nearly 15 hours, putting the K-index up to a severe storm level of 9 on a few occasions, which had the Planetary A-index reaching 108.

At the time of writing yet another Major Flare, a Class M5.5, has occurred at 10:36UTC on November 29<sup>th</sup>.

Finally to round up on things Astronomical, the Leonids Meteor Shower served up a real treat for viewers over North America on Sunday morning the 18<sup>th</sup> with over 1,000 meteors streaking over the sky. Then it happened all over again on early Monday morning the 19<sup>th</sup> as Earth passed through a secondary debris cloud from Comet Tempel-Tuttle, producing a spectacular display of 3,000 plus meteors per hour over Australia and Asian countries around the Pacific Rim.

## New DXCC Entity

As widely anticipated, the IARU agreed to vote the Pitcairn Islands Amateur Radio Association (PIARA) on as the newest member society leading to the announcement that as of 0000z November 16<sup>th</sup> 2001, Ducie Island has become DXCC Entity #335.

This comes about as a result of Pitcairn Island becoming a "Political" as opposed to a "Geographical" Entity now that it has its own IARU society. Thus any Islands that lie outside the minimum distance are granted separate DXCC status. The only blot on the horizon is that the DXpedition due to come on air November 16<sup>th</sup> had to turn back about

80 Nautical miles from Ducie Island as a result of a Tropical Storm in the area which had three metre high waves crashing onto the landing site, making it very dangerous to land safely. A decision was taken to return to Pitcairn Island where some members of the aborted trip were going to operate as a Multi-Multi in the CQ WW CW contest but with time against them they left Pitcairn on November 22<sup>nd</sup>.

Two of the operators, Mike, K9AJ, and Vince, K5VT, are both qualified Doctors so they treated some patients on Pitcairn raising the total number of Doctors from zero to two!

Even though contacts dated after November 16<sup>th</sup> only will be valid for DXCC, Ducie Island will not be added to the DXCC List until June 1<sup>st</sup> 2002, this date is for administrative purposes only, still this now has Ducie Island straight in as number one most wanted!

## Band Reports

The main talking point for November, apart from Ducie Island, is that North Korea was once more on the air with Ed, 4L4FN, obtaining verbal permission to operate as P5/4L4FN. Ed works at the UN World Food Programme in North Korea and had tried to get permission to operate for over two years! Finally he was allowed to bring in an Icom IC706 mark IIG and was told that written permission would be granted before Christmas to satisfy ARRL DXCC requirements. So far Ed seems to prefer to come on 28.575 around 2200z and work Stateside only, although it appears some Europeans have worked him at 1100z on 10m as well.

Obviously the pile-ups have been enormous and unfortunately, as with any semi-rare DXCC these days, very badly behaved so fingers crossed that this will lead to some more operations from this rare country assuming that the North Korean authorities are not listening during the pile-ups!

Ed is now awaiting delivery of a Multi-Band Vertical and a Bencher paddle to increase his signal and modes of operating.

Well known UN workers Peter ON6TT, Matts SM7PKK and Robert S53R, caused major excitement when they came on from the war-torn country of

Afghanistan as YA5T, having received permission to use the call from the "Foreign Ministry of the Islamic Republic of Afghanistan" i.e. the Northern Alliance!

Having already received approval from the ARRL DXCC Desk, all QSO's after November 20<sup>th</sup> are valid for this call-sign. Afghanistan is ranked at #25 on the ARRL Most Wanted List.

All this activity from the rarest of rare led to other proposed trips been overshadowed as it certainly was a month for some rare countries NOT coming on stream.

Bad weather had Mike, GM0HCQ, not been able to land on Signy Island, part of the South Orkneys to operate as VP8SIG. A bit of good news though as Mike did manage to operate on the nights of November 26<sup>th</sup> the 27<sup>th</sup> and the 28<sup>th</sup> as VP8SGK from the other rare VP8 Entity of South Georgia.

Mike is now QRV again as VP8CMH/MM and will hope to be active from South Georgia January 10/11 2002 so keep an ear on 14.052MHz where he seems to prefer to keep up to date with his activities.

Staying with the Antarctica area, Anton, ZS4AGA, is now active as ZS7/ZS4AGA or at times, ZS7ANT from the South African Antarctica Base on Princess Martha Coast (IOTA AN-016). KC4/N3SIG is active until next March from McMurdo Station, Ross Island, QSL him via AI3D.

Slightly north of the Antarctica are the desolate Islands of Tristan Da Cunha and Gough Island. While Tristan is populated and fairly active on the air, Gough is uninhabited and has its own IOTA (AF-030) number and luckily Chris ZS6RI is QRV as ZD9IR for the next couple of months. If you work him, send your card to ZS6EZ.

No problems with the cold weather in the Pacific as we had a glut of activity from French Polynesia and its other Entities, FO/HG9W was very active from the Australs while FO/SP9FIH came on from the Marquesas. Not been left out, FO0DEH continues on his tour of French Polynesia itself and is currently on Pukapuka Island (OC-062) until the beginning of December when he moves to Takapoto Island (OC-131)

Jacky popped up now and then from the Kermadec Islands as ZM8CW but again, nearly always late at night on 10m where there was no propagation to Europe!

The Japanese contest group active as T2T stayed on about two weeks after the

contest and had enormous signals at time on 20m, of course this had huge, "well" behaved pile-ups as well.

On a related theme the BBC announced that due to rising sea levels caused by global warming the, 11,000 inhabitants of the Tuvalu (T2) archipelago will abandon the islands early next year and move to New Zealand. The highest point on the island is approximately 15 feet above sea level. This mass exodus will take about 20 years to complete so Tuvalu shouldn't become too rare yet!

The famous "QSL to PO Box 74421, Tripoli with \$2 and use recommended delivery" will be absent for a while as Abubacker 5A1A, is going to school in Germany. Fear not as three new calls have come on from Libya to keep it active. 5A1ASC is the Assaker Club Station with QSLs going to DK4HB, 5A1HA is Haytm Hashim, QSL to DJ9ZB and finally 5A1TA is Tark Abu Kris, with his QSL manager being EA3GIP. Guess we don't need to use "recommended delivery" for those guys hi!

HK0GU was Gerd, DL7VOG, on from San Andres Island (NA-033) while Elmer, 9L1DX, had some company in the form of Zbib coming on from Sierra Leone as 9L1BTB.

Belgian operators are allowed to use the OQ prefix until December 31<sup>st</sup> to celebrate the birth of Princess Elisabeth while the month of December will be of interest to us amateurs as it will be the 100<sup>th</sup> anniversary of Marconi's successful attempt to bridge the Atlantic.

The Italians will be celebrating by putting IY1SP on air for the month while December 12<sup>th</sup> itself will have a station on from Poldhu, Cornwall and one from Signal Hill, St. John's, Newfoundland to "recreate" the experiment.

All QSO's with the St. John's station on this date only are eligible for a special certificate, so try to work them on the 12<sup>th</sup>.

As reported last issue, Gus was successful in getting his 9U5D call renewed from Burundi and has been quite active. Lots of activity from Ascension Island with Jim ZD8Z, very much QRV as a 10m single op entry in the CQ WW CW and now we have Rick N6ND, back on as ZD8R.

Some keyboarding from Wallis and Futuna (FW) with JA3EMU keeping the RTTY flag flying as FW0DX.

Bob, G3ZEM/5B4AGN, is getting settled into his new home. He plans to be QRV using his contest call P3F in the ARRL 10 Meter Contest. Bob also ex-

pects to operate from one of the UK Sovereign Bases on Cyprus as ZC4ZM and ZC4A.

I received only one log extract this issue which is just as well, as my own log-book contains nothing of interest except for a new IOTA, NA-221, when XF2RCS activated Isla de Lobos.

DU6/K9AW (IOTA OC-129) was a surprise comeback to a CQ call one morning while V8A from Brunei was a new "band" DXCC on 10m and the aforementioned ZD9IR was a welcome entry on 10m.

My thanks again to Denis, EI6HB, for his contribution this issue, which has some interesting contacts including some on the Keyboard mode of PSK31!

Some nice entries to begin with on **10m**: 3V8BB, C6AKO, D44TC, FY5KE, H6C, HC8A, J6R, OH0A, T70A, TG0R, VP9/W6P and YN2EJ all graced the log while heading down to **15m** saw CN8NK, EP3PTT, FG/T93M, FS/AH8DX, HR3J and S21AR safely logged.

Briefly resting his voice Denis went on PSK31 to keyboard with 4K6DI, A45XO (worked with 10 watts) EA8EH and lastly ES7FQ.

### Up and Coming

All this DX means not much room to mention what's coming on the bands but a short list of who to listen out for are JK1FNN and 7L1MKM spending the New Year on Palau as T88HA and T88MY between Dec 30-Jan 6. TM4AMD will be the call used to promote the Arras-Madrid-Dakar vehicle race (formerly the Paris-Dakar race) between Dec 26-Jan 13 with QSLs to F6IGF.

This late item came in just as we were going to print.

Declan EI6FR, and Dermot EI5IQ, are packing the woollies for a trip down to South Georgia and South Sandwich Islands (VP8) as part of a 12 man team between late January/February 2002. Transport will be provided by the Braveheart of Campbell Island fame. We wish Declan and all the team a safe trip down and back."

Finally it remains for me to wish you all a Merry Christmas and a DX full Happy New Year.

Keep all those band reports coming in and keep listening!

73 de EI2HY.

# The only pieces of test equipment you will ever need, for around €150.

By Richard G8SHE

Returning to Amateur Radio after a ten year gap, I wanted to be sure I could comply with my licence conditions. One requirement is to be sure that harmonics and spurious emissions are adequately suppressed.

There are wavemeters available, but few cover 1300 MHz (to measure the 3rd harmonic of 70cm) and I soon realised that a scanner-type receiver, which I already had, would do most of what I wanted. I just needed to put some attenuation in front of it to stop it blowing up when measuring the harmonics of my 100 W power amplifier.

Having acquired a couple of attenuators, I realised that in fact these items plus the scanner constituted almost all of the test equipment I needed, not only to demonstrate compliance with licensing conditions, but also for construction and alignment of transmitters and receivers.

## Here's how!

What you've probably already got: a voltmeter, a power/vswr meter, and a scanner.

## What else you need:

A 20 dB attenuator, which is rated to absorb the maximum power you can transmit and a 0-80 dB variable or step attenuator, in 3 dB steps or better. Both should cover the frequency range you are interested in - in my case this includes 23 cm.

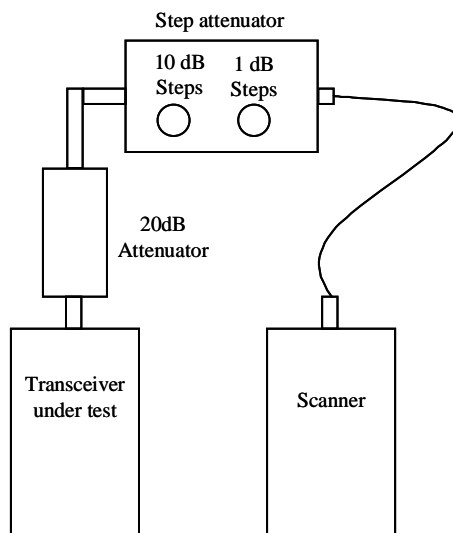
Both of these can be acquired fairly cheaply from [www.ebay.co.uk](http://www.ebay.co.uk) or second-hand test equipment dealers. The Web addresses of several I have found helpful are at the end of the article.

The 20 dB attenuator works very well as a dummy load, but more importantly brings a power of 100 W or so down to the level where things attached to the far end are less likely to blow up.

Mine covers dc - 1 GHz, and absorbs 100w continuous. It cost me €100. If you don't need 23 cm coverage, a 500 MHz attenuator will cost you about half that. If you are prepared to buy "sight unseen" on ebay, you can halve the price again.

An excellent step attenuator is the Marconi TF2163S, available for anything from €30 upwards dependent on its cosmetic appearance. This gives 0-142 dB

attenuation, dc - 1 GHz, in 1 dB steps. Other attenuators are available from such American companies as HP, ARRA, Weinschel, and Telonic; these are generally more accurate but more expensive. All are suitable in amateur use for 1.3 GHz as well.



## Here's how to use them:

### 1. Calibrating the receiver.

Generate a watt or so (as measured by your power meter), through the 20 dB attenuator, into the step attenuator, and then into the scanner. Wind in attenuation until the scanner's S-meter shows S9. Note the attenuation, let's call it X dB. You now know that S9 corresponds to an input level of 10-X dBm.

Scanner sensitivity usually doesn't vary much with frequency, but you might want to take several readings at different frequencies to be sure about this. Also, you might want to check the reading both with and without the receiver's front-end attenuator switched in.

### 2. Complying with your licence.

Wavemeters are virtually unobtainable to measure 432 MHz and harmonics, which is a serious lack as the second harmonic, 864 MHz, falls bang in the middle of the range of frequencies used for Channel 4 TV, which your neighbours might want to watch. Even the slightest emission can be a cause of conflict. Quite apart from your licence conditions, you want to attenuate this harmonic right down.

Key up at maximum power, through the 20 dB attenuator, into the step attenuator, and measure the attenuation required for S9 on the scanner at the transmit frequency: call this X dB.

Now tune the scanner to the second harmonic, wind the attenuation back until you have S9 again. Call this Y dB.

Y-X dBc is the harmonic suppression. Repeat for other harmonics.

For spurious emissions, key up at maximum power as above, and set the scanner scanning from dc to maximum frequency, with about 30 dB set on the step attenuator. Note each frequency at which it stops.

Then measure the spurious suppression exactly as you have just done for harmonic suppression. As most scanners have quite wide filters, you can tune across in 10 kHz steps - but even so, finding every spurious emission can take quite a long time.

In the diagram, I have shown the Transceiver under test connected directly to the 20 dB attenuator, which is connected directly to the step attenuator.

I recommend you do the same. Even a short length of braided cable before the attenuators will radiate so much signal directly into the scanner (unless it is very well shielded) that it becomes difficult to measure low level harmonics (say -50 dBc or less). However, a length of cable from the attenuators to the scanner is a good idea as the direct radiation from the test transceiver to the scanner is reduced if they are a few metres apart.

3. Now you're legal, let's use the equipment as a spectrum analyser so you can enjoy constructing your own kit!

Most modules you want to test can be divided into three categories - those that oscillate, those that amplify, and those that change frequency.

Unless you can match all these modules to 50 ohms, you will need to have some way of probing a circuit without disturbing it too much. A resistor at the end of a piece of cable feeding the step attenuator serves the purpose well. Don't use a wire-wound resistor, and when testing 70 cm and 23 gear keep the leads very short to minimise stray inductance.

A 1k carbon film resistor gives plenty of signal and doesn't detune the circuit under test too much. Cost: 2 cents.

*(Continued on page 7)*

(Continued from page 6)

Oscilloscope probes are easier to use, but cost a bit more.

For tuning up things that oscillate: feed the output to the scanner via the step attenuator, adjust for maximum reading. When the scanner's S-meter reads end-stop, wind in some attenuation and repeat. The scanner's display tells you the frequency, and if you listen to the audio you can get some idea of what the modulation sounds like.

For FM, you also want to set the deviation; this will be covered in the next article. There are several ways of measuring deviation, some are very accurate; none require any more equipment than listed above.

For things that amplify, simply measure the drive level, (let's say A dB of attenuation gives S9 on the scanner) measure the output level (let's say B dB), the gain is B-A dB. Then it's just a case of maximising gain while keeping the harmonics down.

You can use even this very simple set-up to plot the linearity of the amplifier as well, this is merely a plot of B-A against A.

For things that change frequency, the scanner is used to determine the frequencies in and out, the attenuator to determine the levels.

Finally we come to measurements of receiver sensitivity and noise figure. Feed your modulated transmitter on the desired frequency at as low a level as you can, through the attenuators, to the receiver under test. You can probably judge yourself by ear when 10 dB S/N or (for FM) 12 dB SINAD is achieved, but by switching modulation on and off, and taking the audio output from the receiver to an ac voltmeter, you can get a fairly accurate indication.

*Input power - attenuation = sensitivity in dBW.*

Useful surplus test equipment websites:  
<http://www.telnet.uk.com> (note: you will have to click on "view source" to see their stock listings)  
<http://www.telford-electronics.com>  
<http://cooke-int.com>  
I have tried all of these and they are reputable. .. and of course don't forget [www.ebay.co.uk](http://www.ebay.co.uk)

There are dealers in Germany and Italy as well which I have not yet tried, but which have the advantage of being in the Eurozone.

## The Night Before Christmas

By N8IWK

T'was the night before Christmas,  
when all through the shack,  
not a meter was stirring,  
not even on the rack,  
the finals were hung by the chimney  
with care,  
in hopes that St. Nick would tune them  
right there.

The children were nestled all snug in  
their beds,  
while visions of moonbounce danced in  
their heads;  
and Mama with her handheld, and I with  
a trap,  
had just settled our brains with a high  
voltage zap. ...

When out on the tower,  
there rose such a clatter,  
I sprang from the bench to see what was  
the matter.

Away to the window I flew like a high  
tension flash,  
tore open the shutters and threw up the  
sash.

The moon on the breast of the new fallen  
snow,  
gave the glow of tubes of days long ago.  
When what to my wondering eyes  
should appear,

but a miniature sleigh, with mobile ama-  
teur gear;  
With a little old ham, so lively and  
quick,

I knew in a moment, it must be St. Nick.  
More rapid than McElroy,  
his keying it came and he listened and he  
tuned and called them by name;

"Now Dasher! now Damper! now Phasor  
and DX'en, on Common! on Coupled!  
on Donor and Blitzen!

to the top of the shack, to the top of the  
wall! now dash away! dash away! dash  
away all!"

As dry days before the field day do fly,  
when they meet with the forecast and  
never comply,

so up on the shack top the signals they  
flew,

with the sleigh full of gear, and St.  
Nicholas too. ...

and then in a band opening I heard on  
the roof,

antenna work by a ham on the hoof,

as I drew in my head and was tuning  
around,  
down the feedline came St. Nicholas  
with a bound.  
He was all tangled in coax,  
from his head to his foot  
and his checksheets were all tarnished  
with ashes and soot.

a bundle of gear he had flung on his  
back,  
and he looked like a contester opening a  
six pack.

His handheld-how it crackled! the sig-  
nals would vary!

His equipment made noises, his QSO  
was quite merry!

His droll little mouth was drawn up like  
a mho

and the beard of his chin was white as  
slow scan snow.

The stump of a pipe he held tight in his  
teeth,  
and the smoke it encircled his head like  
a wreath.

He had a broad face and a round little  
belly,

that shook when he laughed, like the roll  
of a tele.

He was chubby and plump, a right old  
elf,

and I laughed when I saw him, in spite  
of myself;

a wink of his eye and a twist of his head  
soon gave me to know I had not to QR-  
Zed.

He spoke not a word,  
but went straight to his work, and tuned  
all the finals,

then turned with a jerk,  
and keying his finger aside of his nose

and giving a nod,  
up the feedline he rose.

He sprang to his sleigh,  
his handheld gave a whistle,

and away they all flew,  
like the down of a thistle.

but I heard him exclaim ere he faded out  
of sight;

"73's to All ..... and to All ..... a Good  
Night"

(published on eHam.net)

# Club Roundup

## Cork Radio Club

Theory Classes for the Radio Experimenters licence started recently and are being held on Monday nights at Wilton park House at 8pm. New students are most welcome and should just turn up on any Monday night.

Congratulations to Assumpta Bowen on getting the callsign EI8JF.

The Club's annual Christmas bring and buy with refreshments was held on Monday 17th December..

Members recently enjoyed a video on the use of Radio Beams by the Germans in the 2nd World War. These beams guided planes to their targets. When the UK Defence Authorities discovered this they had to buy up amateur equipment to track them because they used a frequency of 31MHz.

CRC sends best wishes to Stephen EI6JA who will be sailing abroad with the Naval Service in the New Year for a few months. He hopes to be QRV on HF while away.

Members of Cork Radio Club joined by other amateur visitors had a very enjoyable visit recently to the RTE Radio Museum, which is located in the Old Women's Prison in Cork. The club was welcomed by Larry EI8FJB who is responsible for supervising the display and by Diarmuid and Mary Kennelly who are the owners. The many old Radio's and equipment for outside broadcasts as well as many other artifacts aroused great interest. The museum also contains the old studios of 2CK, which was the old callsign of the radio station, which followed 2RN in Dublin. After refreshments which were provided for the group, Finbarr EI1CS thanked Larry and the Kenneallys for a most enjoyable evening. It is well worth a visit for any amateurs on a visit to the city.

Cork Radio Club sends their congratulations to Neil Tomkins on getting his new callsign, EI8FUB.

## Fingal Radio Club

On Monday 22nd October 2001 the annual general meeting of Fingal Radio Club was held at the club room, in the Erin's Isle Complex, Farnham Drive, Finglas. There was a very good turn out of members for this important event. The year in review was discussed and plans for the future were proposed.

The change over to the euro and its effect on income for the club was discussed and fee's for the new year approved.

The committee for next year was elected, Liam Murphy EI 3 HK  
Harry Boyle EI 9 BW  
Chris Yeates EI 7 AAB

The club held an information - open day together with a small bring and buy section in the club's room at the Erin's Isle complex on Saturday 24th. November.

Further information from any of the committee at QTHR, or by e-mail to fmgalradio@hotmail.com  
or phone Chris on 086 355 2891  
or Liam on 087 252 1542  
Fingal Radio Club EI 2 FRC

The officers for the year 2001/2002 were elected at the first meeting of the new committee on Monday 5th November. Henry Boyle EI9BW is the new Chairman, Liam Murphy EI3HK is the Hon. Secretary and Christopher Yeates EI7AAB is the Hon. Treasurer

Three members of the club, Sean EI7CV, George EI7EC and Chris EI7AAB, together with Gerry EI9DZ, travelled to North Wales to attend the Llandudno rally. Many friends old and new were contacted and a few small bargains as well were made. A delicious meal in the restaurant on the HSS on the return trip finished off a delightful short trip.

## Tipperary Amateur Radio Group

The AGM of the Tipperary Amateur Radio Group was held on Wednesday 7 November in Raheen House Hotel Clonmel. The meeting was very well attended with the majority of the membership present. The meeting was called to order by the chairman Hugh O'Donnell EI2HI and Secretary John Burke EI2JB read the minutes of the 2000 AGM. The Treasurer Tommy Hallinan EI2IT presented his report detailing the financial affairs of the Club during the year. Hugh EI2HI then addressed the meeting and gave a full review of the clubs' activities during the year. He thanked the committee and general membership for their contributions to the club throughout the year.

The following committee were elected for the coming year:

Chairman: John Burke EI2JB  
Secretary: Noel Walsh EI2JC  
Treasurer: Tommy Hallinan EI2IT  
Vice-Chair: Ron McGrath EI6GO  
PRO Paul Norris EI3ENB

Club members taking on other duties include:

QSL Manager Marie Kelly  
Group Librarian Eddie EI7FFB

Local IRTS News readers are Gerry EI5HJ, Liam EI7FE and Tommy EI2IT. A special mention to John EI3DIB and Hugh EI2HI both of whom are taking a break from official club duties after many years of sterling service.

Tipperary Amateur Radio group wish to draw your attention to the following changes in the groups activities :  
IRTS News Bulletin :  
as and from the first Sunday in December the news on 2m  
and 70 cm will be broadcast at 2030/8:30 pm local time.

Transmission frequencies are 433.450 MHz and 145.450 MHz

Club Meetings:

Also from December the monthly meetings of TARG will be held on the FIRST THURSDAY of every month at 8 PM in Raheen House Hotel, Clonmel and visitors are always welcome

Tipperary Amateur Radio Group held their annual Christmas dinner in the Galtee Inn in Cahir on Saturday the 8th of December.

## South Dublin Radio Club

Congratulations to South Dublin Radio Club member Kevin Craig, who has been issued with the new call sign EI6JD. Kevin attended the SDR Morse classes earlier this year, and passed the Morse test a few weeks ago. Kevin is already active on the HF bands.

The South Dublin Radio Club Christmas Party took place on Tuesday, the 11th of December. The venue this year was the Templeogue Inn, which is known locally as "The Morgue". The party commenced at 8.30 pm, and a great night was had by all.



# My New Shack

By Ger EI8HT

It's been a long time since I had the neck to write something for the Newsletter. Is it because I can now spell, and the grammar has improved? I don't think so. Maybe its down to the new computer and the way it corrects all and I mean all the mistakes I make. Wish I had this when I was going to school back in nineteen nought frozen to death.

I guess I wouldn't be sitting here now retired, enjoying the good life as a professional DX'er.

Anyway what have I been doing with myself?

I hear you say. Well I haven't been flying any more kites or operating portable and running from the goats on Capel Island.

Instead I think I've become a sort of an honorary Cavan man. I thought the fags where getting a bit expensive so I gave them up. The question now was what was I going to do with all the lovely lolly I'd saved (about £40 per week) before Noreen (the real boss) could get her hands on it?

So thinking to myself, as I often do, and you know the best person to have an argument with is yourself, you never lose. Where was I yes, what do I spend the money on?

Well the old computer was starting to give me problems and as I had it for about four years I thought it was time for an upgrade so out with the old and in with the new.

It was about then that the smell of nicotine started to get to me and as I didn't want my lovely new machine to smell like the bottom of a zookeepers boot, I decided to do a complete revamp.

It was then that I realized what a mess I had, with all the old cables, most of them redundant under the bench. It was about time I did something about it, so anything not been used, out it went.

I fitted some cable trunking, then I stole the tinfoil from the kitchen and wrapped all the coax and control cables before inclosing them in the trunking. I found that this helps cut out some if not all the interference that the computer, espe-



cially the monitor causes.

So with the computer on the top shelf I was able to fit tin plate on the underside of the shelf. This again helped.

With an interface connected to run PSK31, also to help with log keeping, it is impossible to completely isolate the radio from the computer. Still I think I've got it as good as its going to get. Next I fitted wood panelling to walls and ceiling, varnished and last of all treated myself to a new chair.

Even got myself one of those cork notice boards. Everything looks nice and tidy and what do you think Noreen?

I say, do you like the new shack?

"What about the two hard points you'll need to fit so that you can sling you hammock?" She says. Well you spend so much time in there you might as well move in all together. Its great to feel loved hi.

On a more serious point, as I sit here in the shack on a wet Sunday afternoon trying to write this? I'm still thinking to myself what are we trying to do, are we mad?

Do we really want to shoot ourselves in the foot? What in the name of God is he on about now I hear you say.

Well to explain, one of the articles on the news this morning was that the Russians have decided to keep Morse Code as a requirement for a HF licence.

Well stand up you beauties and give yourself a great big pat on the back. It's about time someone did what the Russians are doing.

Why are we so determined to get rid of something that we worked so hard to learn in the first place?

Is it because those who are too lazy to learn it have bigger sticks? I wonder. And what's this I hear about the ODTR not recognizing CEPT, because someone from the UK say M5XXX can't operate HF in Ireland.

Has the M5 passed the Morse test at 12wpm? No he has not, and to operate HF in Ireland, according to regulations, you must have done so.

What has this got to do with CEPT?

Well I seem to remember something in regulations about if you are operating in another country then you come under their regulations as well as your own country's regulations.

If this is the case, then why do I read in the newsletter something about the committee and the ODTR not honouring the CEPT agreement?

Unless I'm wrong about the regulations, the ODTR are perfectly right in not allowing anyone to operate on HF who has not passed the Morse test at 12 wpm.

On a similar point it seems to me as if the committee are trying to get the ODTR to lower the speed from 12 wpm to 5wpm to bring us into line with other countries. Why?

Is this what the member's want? I'm not sure. Were we asked? I don't think so. If we were what would we say? I for one would be very interested to find out once and for all what the members think. Should we change? The only way to find out is to ask us. And how do we do this? Simple!

All you need is a questionnaire, which can be sent at no extra cost with the next edition of Echo Ireland. This way at last we know the views of all paid up members.

So let us all be a little Russian and have the liathroidies to stand up and be counted.

De Ger EI8HT.

## EI Ham Buy And Sell It Forum Back on Line

Please visit <http://www.qsl.net/ei8ic/>

EI8IC is proud to announce that after a rather long absence due to server problems, the EI Ham Buy And Sell It Forum is back on line with a new set of software, a new layout and plenty of space for all your Radio Amateur adverts.

The 'EI Ham Buy And Sell It Forum', for those who have not heard of it before, is a FREE service that allows you to place 'For Sale, Wanted, or Exchange' adverts for your Amateur Radio, Electronics and Computer equipment on the web at a site that gets many visitors every day and is fast becoming of major interest as a resource centre for the world wide Contesting Community.

If you wish, you can also subscribe to the optional information service. By leaving your email address, and responding to the security check, you will be informed whenever a new advert is placed on the Forum.

The site has a strict Privacy Policy. Your email addresses will never be passed on by EI8IC to a third-party, and you can un-subscribe from the information service at any time.

After placing your adverts, please visit the rest of the EI Contesting website. It has recently had a major re-write, and with the addition of about 50 new pages, there is much of interest to the new or experienced HF Contester, including :

Contest Calendar  
Budget Contesting  
Beginners FAQs  
Topband Info  
Operating Methods  
Contest Checklist  
Graphical Bandplans  
A set of Irish Great Circle Maps  
Big Gun Contest Stories  
Contest Planning  
Downloads  
Specialised Links Pages with full pre-click page information  
A full EI Contest Results section  
Past EI HF records

Visit <http://www.qsl.net/ei8ic/>

## Letters Page

### Pen Friend Wanted

<http://go.to/beaconet>

Dear Editor

I have a request from Jirka (OK2PGJ). His daughter Jitka is 15 years old and would like to have a pen friend in Ireland (boy or girl) of about the same age who would be interested in corresponding in English if interested please write to:

Jitka Janouskova  
789 62 Olsany 144  
Czech Republic.  
73  
James EI2IV

### Help Wanted

Hello dear OM,

My name is Jean-Philippe, my callsign is F5SMZ and I'm located in JN39EJ.

I'm a permanent active station of a group of OMs studying propagation on many different bands from HF to UHF by using digital modes, from AX25 to PSK31, this is the project called "BEACONet".

All you need to understand the project concept and what you need to set up to be QRV is explained on the following website.

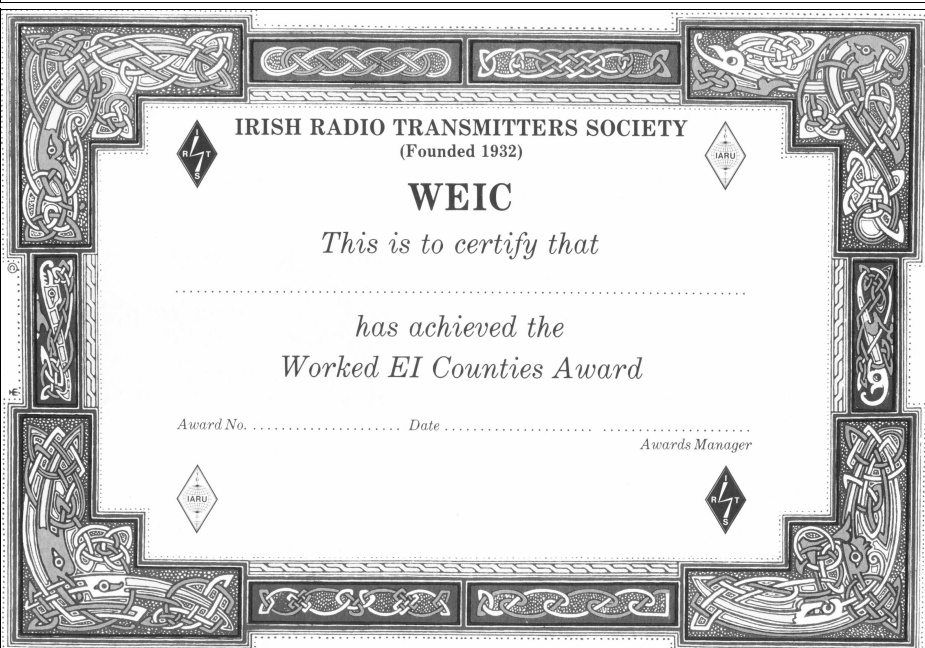
For now we are looking for partners all around the world to join our network, especially on 10m, by using AX25 1200 bauds USB on 28.128 or mainly PSK31 USB on 28.131.

Stations in USA are at the beginning of the project, but now as the concept seems to work, the project scope have been widened to the rest of the world. Most of active stations are still from North America, but South America and Africa have joined the project recently.

I hope that the project will interest you and you will be able to join us in the near future.

If you are not interested in this project could you forward this information to other OMs that you estimate could be interested in, but to monitor in real time propagation on 10m band you can at least monitor 28.131 in PSK31 where BeacoNet stations are 24/7/365 active and provide permanent and reliable signal sources.

73 de Jean-Philippe, F5SMZ



### The Worked EI Counties Award

This award is available to all amateurs and Shortwave Listeners for working/hearing at least 20 of the 26 counties of EI.

Amateurs in Ireland must submit the necessary QSL cards. Others must submit a statement from their National Awards Manager that they are in possession of the cards.

A separate "All 26" sticker is available for confirmation of all 26 Counties.

Application to the Awards manager, P.O. Box 462, Dublin 9.

# **Jamboree On The Air 2001**

## **Reports from Bayside and South Dublin Radio Club**

### **JOTA Report**

#### **from Bayside Scouts Radio Group EI4BST**

The 132<sup>nd</sup> CSI St. Joseph's Scout Troop, Bayside, Dublin participated in the recent Jamboree On The Air setting up 2 HF stations (SSB and PSK31) and also operated on 2 meters and 2 meters Packet.

The output on the PSK31 Station was 35 watts and the antenna was a half size G5RV and the software was the Digipan PSK programme.

Contacts included K1BSA, the USA scout HQ station and QSOs with Rhodes, Turkey and most European Countries.

Altogether, 39 DXCC Countries were worked.

Best DX on SSB was to Senegal, Brazil, Venezuela, U.S.A and Canada.

Sean EI3IP organised APRS Packet transmissions to the International Space Station to coincide with its passes over Dublin (and Echo India) and we look forward to downloading the Data Maps from the ISS to see if the EI4BST/J transmissions have been sourced by them and printed on their ground maps.

Voice transmissions to the ISS were also attempted.

QSOs were heard with Stations in Belgium, France and Great Britain.

The Group wish to thank the 132<sup>nd</sup> Venture Scouts for all the help with the antennas and thanks also to Mark EI4FNB, Paul EI3FKB, Joe EI4FV, Sean EI3IP and Keelan EI 1139 for a successful and enjoyable JOTA 2001.

### **South Dublin Radio Club operate JOTA in Wicklow**

SDR members set up a JOTA station in the scout hall in Wicklow Town for the recent Jamboree On The Air weekend.

The scout hall is located just beside the river Vartry, close to where the river joins the sea.

The SDR members put up two HF antennas, including a Windom with one leg spanning the river, along with a number of VHF antennas.

The event proved very popular with the Wicklow scouts, and a large number attended the event on both the Saturday and Sunday.

Many other JOTA stations were worked, with excellent signal reports received from most contacts - confirmation that the Windom over the river was highly effective.

Although the scouts seemed reluctant to take the microphone at first, within a few hours there was a queue of scouts anxious to take their turn sending greetings to fellow scouts in other JOTA stations.

The demonstration of amateur radio was made even more in-



Members of the Wicklow Scouts exchanging greetings with another scout troop during the JOTA event in October



SDR member Daniel Cussen with members of the Wicklow Scouts during the JOTA event in October

teresting for the scouts when an Amateur Television Station was set up in a car park above Wicklow town, beaming pictures to the scout hall. This was a real hit with the scouts.

You can see some pictures of this and other recent SDR events on the club's web site at [www.qsl.net/ei2sdr/](http://www.qsl.net/ei2sdr/)

Joe Ryan EI7GY

## **Phoenix Amateur Radio Club**

# **Euro Radio Rally**

**Coolmine Community School**

**Doors open at 1100**

**Car Parking available**

**Further details from Tom EI2AJ at QTHR**

**Sunday February 24th 2002**

**Admission 3 Euros**

**Tea Bar and sandwiches**



# A Cross Between Mardi Gras and The All Ireland Final!

By John Corless EI7IQ

*John Corless EI7IQ visited two shows in the UK this year and discovered amongst others, the PW Stand!*

I made it to two Rallies in the UK in 2001.

The Leicester Show in September is held at Donnington Park Motor Racing Circuit and is a great event. I think it is the fact that it is the (normally) great weather and the exceptional venue which impresses me as much as the show itself.

Last year (2000) the two day show was held on the Friday and Saturday before a major motor cycle racing event on the Sunday, and the roar of the powerful machines as they weaved their way through the track in a last minute practice on the Saturday, was very, very impressive.

The track runs right alongside the exhibition halls, and one would be forgiven for thinking that the bikes were actually in the hall, tearing through the aisles between the stands!

This year, it was the turn of the Touring Cars, which are not quite as impressive as bikes in my view, but nevertheless created their own magic, and added to the Rally in no small way!

The 2001 Leicester Show, was dominated by the Radio Communications Agency announcement on the new UK licensing plans which were as described in the last issue, quite sensational.

The Show itself was enjoyable, with many outdoor exhibitors, selling a myriad of novelties, nostalgia and plain unadulterated rubbish!

I was the collector of some of their *Collector's Items*! And of course they were the collectors of my Sterling!

I picked up two switch mode power supply units for a tenner, and had my generous offer of a fiver for a working computer, accepted!

There is an area near the hall, where many caravans, campers and tents were parked/pitched. I feared for receiver font-ends as I noticed the ubiquitous G5RV multi-band dipoles, strung almost together, in a daisy chain!

Inside the hall, I met Rob Mannion (Dr. Mannion to his friends) at the PW Stand.

The PW stand is very difficult to miss, due to the balloons, ribbons and novelties. It is a bit of a cross between Mardi Gras and the All Ireland Final.

On the stand with Rob G3XFD/EI5IW, were Tex Swann G1TEX and Donna Vincent G7TZB.

At the 2000 Show I had presented Rob with a bottle of Irish Whiskey to coincide with his call sign and purely for medicinal, experimental and evaluation purposes.

This had the effect of immediately attracting Willie Long EI6AI, to stop-by for a chat, - he was just passing by at the time of the presentation, and generated considerable interest from many visitors to the show.

This year a visitor from Northern Ireland, while I was at the stand, gave Dr. Mannion a bottle of Bushmills, claiming this to be a superior blend!

I also noticed, but was too polite to comment on, a not inconsiderable quantity of apples, potatoes and other fruit and vegetables on the PW stand, - an assortment and volume that would not be out of place at the Moore Street Market in Dublin's Fair City!

Amongst the many traders appearing at the 2001 Leicester Show, were the people with the weather satellite decoding software and equipment, - Timestep Weather Systems of Newmarket, Cambridgeshire.

I had to strategically avoid this stand, after last year's episode. For some reason or another, the personnel on the stand were not very enthusiastic about my concerns for cattle I had moved from one field in my farm, to another. I tried to use their equipment to zoom in on the West of Ireland, at last year's show! The cloud cover spoiled the view!

This year's show had many Irish visitors with Dave Moore EI4BZ and Jim Barry EI8GS making the trip from Cork, amongst the Irish contention.

The Leicester Show is well worth a visit, and is located in a part of the UK with many attractions, of no connection with amateur radio matters. The town of Matlock in Derbyshire is a great area to bring children of all ages, East Midlands Airport is only a few miles away, and

the cities of Derby, Nottingham, Birmingham and Leicester are also close by.

The British Sports Car Museum is located at the track also, and houses nearly all the F1 cars from years past.

## Scaffolding Incomplete - Do Not Use

My annual trip to the Pickets Lock in November went as smooth as ever again this year.

Accompanied on this occasion by Brendan EI6IZ and Padraic EI9JA, we arrived in London on Friday night via Dublin and Holyhead and the impressive Irish Ferries vessel Ulysses.

On the early-morning journey to Dublin, Brendan worked many US stations on 80m with his Icom IC706 and a brilliant antenna called a *Screwdriver*. (I did the driving.)

The Screwdriver is a very impressive performer. We travelled in Brendan's VW Transporter on which the antenna is mounted on the front bumper.

The Antenna consists of a tube approx a metre long, on top of which is mounted a whip. When we set off, this antenna was not attached to the vehicle, and when we stopped for a mug of tea along the way, Brendan retrieved it from inside the van and assembled it. When it was time to move off again, I thought I had parked too near a pole, and attempted to reverse away from the antenna!

I reckoned that he should have a "Scaffolding Incomplete- Do Not Use" sign on it!

Apart from this minor drawback, the antenna is an outstanding performer and worked well in the UK over the weekend.

The Show was well down on major traders, on other years, but the numbers held up due to the increase in the number of other types of traders.

Martin Lynch & Sons Open Day clashed with the Saturday Show, which is a pity, given that there are three hundred and sixty four other days in the year, but then that is a matter for others. This show has lost a hall over the last few years, gone from three packed halls

(Continued on page 13)

(Continued from page 12)

three or four years ago, to one and a half halls this year. Despite this we still managed to pick up a few bargains, again pre-owned computers (ideal for logging etc) were great value, and the Bring & Buy Auction on the Sunday was very entertaining.

We met up once again with Willie Long and his touring party from Donegal and Galway!

Gary O'Hanlon was also present, as were many EI enthusiasts. The Show is easy to get to from North or North East London, and accommodation just outside the M25 is not all that expensive.

A second Picket's Lock Show is held in March, I have never made it to that one, but the November one is worth a look at, - but if I had to make a choice I would prefer the Leicester Show, of the two.

On the return journey Brendan worked many stations again on eighty, including, as we neared the Welsh border, Peter EI2IU, in Castlerea Co. Roscommon.

The reason I mention the Welsh border is that both Padraic and myself worked Peter as well as Brendan, and just as Padraic was finishing with him, we crossed the border, which changed the call sign prefix, which meant more logging for all concerned!.

Peter commented that he had more contacts with the van than he would through a repeater!



**James Linehan EI2IV**

## Squares Table September 2001

Call	2m	4m	6m	70cm	23cm	Total
EI2JD	26	0	206	1	0	233
EI2FSB	6	0	125	2	0	133
EI3IO	0	11	222	0	0	233
EI3IS	0	0	140	0	0	140
EI3IX	5	2	225	6	0	238
EI3EBB	3	0	274	1	0	278
EI4BZ	10	0	0	0	0	10
EI4IX	80	0	172	0	0	252
EI5FK	107	0	324	28	0	459
EI5FZB	6	0	0	0	0	6
EI6FZB	0	1	0	0	0	1
EI7BFB	28	0	89	1	0	118
EI7BMB	5	0	292	0	0	297
EI7FAB	0	3	25	0	0	28
EI7CD	0	0	129	0	0	129
EI7GL	37	9	276	5	0	327
EI7IQ	0	1	30	0	0	31
EI9IW	6	1	85	3	0	95
EI9JA	0	1	0	0	0	1

Please submit your final score for 2001 to to Joe Fadden EI3IX at [joe\\_fadden@yahoo.com](mailto:joe_fadden@yahoo.com) early in the New Year so that the final table can be published in the next issue of the Newsletter

A new table will then start for 2002

## Contest Calendar

### December

30/2nd	2200-1600	ARRL 160m Contest	CW
8/9th	0001-2359	ARRL 10 Metre Contest	CW/SSB
15th	0001-2359	OK DX RTTY Contest	RTTY
15/16th	1400-1400	Croatian CW Contest	CW
29th	0001-2359	RAC Canada Winter Contest	CW/SSB
29/30th	1500-1500	Stew Perry 160m Distance Challenge	CW
29th	1800-2000	Internet CW Sprint Contest	CW

### January

11/12/13	2200-2200	Japan Intl DX 160-40m	
19/20th	1200-2359	LZ Open Contest	CW
25/26/27th	2200-1600	CQ 160m	CW
26/27th	1300-1300	UBA Contest	SSB
26/27th	1200-1200	BARTG RTTY Sprint	RTTY
26/27th	0600-1800	REF	CW

### February

2/3rd	0001-2359	10-10 International Winter Contest	SSB
9/10th	2100-0100	RSGB 160m	CW
9/10th	1200-1200	Dutch PACC	
9/10th	0001-2359	CQ/RJ RTTY WPX	RTTY
16/17	0001-2359	ARRL DX	CW
23/24th	1500-0900	RSGB 40m DX	
23/24th	1300-1300	UBA Contest	SSB
23/24th	0600-1600	REF	CW
22/23/24th	2200-1600	CQ 160m	SSB

<http://www.sk3bg.se/contest/>

# Cork City Gaol Radio Museum

(incorporating the RTE Museum Collection)



Cork City Gaol, located at Sundays Well in Cork City, forms part of Cork's rich historical and cultural heritage and holds a special interest for all connected with radio broadcasting.

The main Gaol building is contained within an oval enclosure - the very high walls ensuring no escape but also denying law abiding citizens the opportunity to see one of the finest examples of Ireland's architectural heritage.

A listed building, the gaol was constructed by Sir Thomas Deane, to designs of Robertson of Kilkenny and boasts that its drawings were copied by John Hogan - Ireland's most celebrated neo-classical sculptor.

Cork City Gaol opened in 1824 and was used as a prison until 1923. Today, visitors can once again wander through the



The reconstructed studio

cell wings in an atmosphere, which suggests you are accompanied by the shuffling feet of former inmates - each life-sized figure representing their own particular period in Irish history from pre-famine times to the foundation of the state.

Original graffiti on cell walls tell the innermost feelings of some inmates, while a spectacular audio-visual presentation tells the social history of contrasting lifestyles of 19<sup>th</sup> century Cork - and why some people turned to crime.

Ironically, after trying to impose silence on the inmates for 99 years, the next use of the Gaol was to broadcast, with the opening of 6CK in 1927.

When Radio Eireann was expanding, the Minister of Posts and Telegraphs was J. J. Walsh of Bandon and it was decided to come to Cork.

The civil servants were given a budget allocation of £9,000 with which to find a suitable building, on a height, with enough ground within a secure enclosure on which to erect the masts, to create an actual radio broadcasting studio and employ management and staff. Somebody remembered the "old women's gaol" and that is the reason that the former Governor's House became a broadcasting station.

National broadcasts were made for nearly two years and thereafter (because of cutbacks) programme making was, more or less, confined to Sunday nights and in the 1950's the station moved to Union Quay.

When Diarmuid Kenneally was restoring the Cork City gaol, he also restored the radio broadcasting studios. He then contacted Paddy Clarke, Broadcasting Historian who was working for RTE at the time.

Paddy had over the years, built up a magnificent interesting collection of radio artefacts, which apart from one exhibition at Portobello, was not afforded the exhibition space it deserved. Negotiations took place with RTE and to everyone's delight, the collection came to its permanent home in the former 6CK studio at Cork City Gaol.

In addition to the magical artefacts of early broadcasting in the Radio Museum Experience, the areas surrounding the original studio house a permanent exhibition dealing with Marconi and the birth of radio, notable Irish and world vents and broadcasting personalities.

The exhibition is open daily throughout the year and attracts many radio enthusiasts from both home and abroad.



The Engineers desk next door to the studio



Older readers will recognize some of the items in this photograph



A section of the large display of vintage radios.

**The Gaol and Museum is open  
7 days a week**

**March - October 0930-1800**

**November-February 1000-1700**

**Telephone 021-4305022**



Members of Cork Radio Club pictured during a recent visit to the Gaol and Radio Museum (See page 8)





# Contest Corner

With  
Dave EI4BZ  
ei4bz@eircom.net

Welcome to another edition of Contest Corner.

The big contests of the year have come and gone and lots of EI stations were heard or spotted on the cluster during the CW and SSB CQWW events.

The following request from CQ Magazine for all logs to be submitted electronically has caused much comment in recent weeks.

*To all amateurs active in CQ-sponsored contests:*

*Due to security concerns, CQ Communications Inc. is asking all participants in CQ-sponsored amateur radio contests to submit their logs electronically.*

*All logs for the CQ World Wide DX Contest, the CQ WPX Contest, the CQ World Wide 160-Meter Contest, the CQ World Wide VHF Contest and the CQ/RTTY Journal RTTY contests should be submitted via e-mail per instructions in the rules for each contest. In light of recent events regarding hazardous items sent through the mail, logs received through the mail at the CQ offices will be held unopened until all potential health risks have been evaluated. CQ says it cannot guarantee that logs submitted by postal mail will be opened. Contesters who want to be sure their scores will be counted must submit by e-mail.*

*"We regret the need to inconvenience those testers who do not have access to internet-connected computers, or who choose to log by hand and submit those hand-written logs," explained CQ Communications President Dick Ross, K2MGA. "But our logs come from all over the world. While the risk that amateurs might be involved in any sort of terroristic activity is extremely small, mail en route may be subject to tampering. We cannot ask our staff members or contest committee volunteers to possibly expose themselves to dangerous packages sent through the mail."*

*"We are not giving in to terrorism," added CQ magazine Editor Rich Mose-son, W2VU. "We are facing a very real and fast-growing threat and we are taking reasonable precautions to protect our staff and volunteers."*

73,  
Rich W2VU  
Editor, CQ

## CQWW SSB in East Cork.

In the SSB leg of the CQWW, members of the East Cork Group were joined by some members of the Bristol Contest Group at Poer Head for a serious effort.

The main aim was to break the long standing record set by EI9CB and this was duly achieved with a score of close to 12 million points.

Weather conditions were, for a change, ideal for the field day style set which involved erecting two full aerial set ups.

The normal EI7M gear was boosted as the Bristol boys towed over a fine 100 foot mobile tower. However, they could not be persuaded to leave it after them!

The aerial set-up was a two element Yagi for 40m and a tribander for the higher bands on each station.

A full wave loop was erected over the sea for top band.

John EI7BA supplied his K9AY loop for listening on the low frequencies.

A fairly high European finish is hoped for.

Once the Christmas panic is over, we have the Canadian RAC contest on Saturday the 29th. This runs for the full 24 hours.

Top Band enthusiasts have the Stew Perry Contest starting at 1500, also on the 29th. This one runs until 1500 on the 30th.

The CQ Top Band contest will be held over the last weekend in January, starting at 22000 on the Friday night.

Another one for the low band operators is the Japanese International DX Contest on 160 to 40 metres on the 11th to the 13th of January.

The LZ open is on CW on the 19th and 20th and on the following weekend the popular UBA SSB contest will be held. Also on this weekend the French (REF) CW contest is taking place.

The big one coming up is the ARRL CW on the 16th and 17th of February.

Have a look at the calendar on page 13.

Have a great Christmas and a prosperous new Year.

Dave EI4BZ

## Members Advertisements

### Wanted:

Valves for the following Bush Rx (AC/DC mains). Brown bakelite model.  
Type DAC 90A. Serial No. 97 02376.  
UY 41 (or equivalent UI41 or 311SU)  
U 11 41( or N142 or 451PT)  
UF 41 (or W142 or 121VP)  
UCH 42 (or X142 or 141TH)  
Also mains lead for same. Any information appreciated.

Telephone 0503-40086

### For Sale:

Yaesu Speaker SP901  
Matching pair valves, 6146B. Penta, + 12BY7A  
Matching pair valves, 8950.GE.USA for Swan.  
Low Loss Filter.  
Hy-Gain Vertical Antenna 12AVQ, 10/15/20m.  
Mini Beam G4MH, 10/15/20m. Boom length 1..5m.  
All offers to Leo EI8BR at 01-2809382 anytime.

### For Sale:

MFJ 654 paddle Key £45.00  
MFJ 9020 CW TX £150.00  
MFJ 971 ATU £70.00  
MFJ 401B Keyer £40.00  
Hi Mound Straight Key £30.00  
Microset 7 Amp PSU £40.00  
Contact Batt EI5HQ at 054-47707  
or battobr@eircom.net

### For Sale:

Yaesu FC902 ATU.  
Cooling fan for FT101 etc.  
Hygain TH3 Mk3  
Fox Tango Newsletters 1979-1983 (inc)(  
These cover repairs, mods, improvements, reviews etc to the FT101/Z/ZD  
Free Radcom, 1987 to the present day.  
Telephone 061-397004.

### For Sale:

Yaesu FT902 for spares, transformer gone. Also 901R Transverter, perfect.  
Highest offers secures.  
Phone EI6GA 01-2824626, evenings



The Belgian IARU society UBA proudly presents The OQ Award at the occasion of the birth of H.R.H. Princess Elisabeth, born on October 25th, 2001.

Belgian stations are entitled to use the special prefix OQ until the end of 2001. Every HAM and SWL is encouraged to apply for this commemorative certificate.

#### Requirements:

Work/hear stations using the OQ prefix between October 26th and December 31st, 2001.

On HF, Belgians need at least 15 different stations, including at least 4 different prefixes;

On VHF/UHF Belgians need at least 20 different stations, including at least 6 different prefixes;

Other Europeans need at least 7 different stations, including at least 3 different prefixes;

All others need at least 5 different stations, including at least 2 different prefixes.

There are no band restrictions, but repeater contacts are invalid. All modes, except packet radio may be used.

Send your log extract + the fee of 5 IRCs or 5 US\$ no later than February 28th, 2002 to:

UBA Award Manager,

Egbert Hertsen, ON4CAS,

Postbus 85, Mechelen 2, B-2800 Mechelen, Belgium.



**John Corless EI7IQ**

## Atlantic 252 takes on BBC Radio 5 Live and TalkSport in the U.K.

BBC Radio 5 Live and TalkSport are to face a new UK national competitor in the radio sports broadcasting market, following a change of ownership at Atlantic 252.

The Republic of Ireland-based long-wave dance music station Atlantic 252 is to be relaunched as a sports-based service, after sports internet and radio outfit TEAMtalk Media bought RTL's 80% stake.

TEAMtalk has paid £2m in cash for the RTL holding, as part of a deal expected to be completed by the end of November. Irish state broadcaster RTE is to retain the remaining 20% stake in Atlantic 252.

Last year Atlantic 252 reported a loss before tax of £480,000, on sales of just under £4m.

The Atlantic 252 acquisition continues TEAMtalk's drive to broaden its content delivery base by creating an additional platform for the distribution of TEAMtalk sports content.

TEAMtalk intends to rebrand the station as TEAMtalk 252 and relaunch it as a predominantly sports-based station by the end of the financial year.

The station will continue to broadcast from Radio Tara's facilities in Ireland to a UK audience on Long Wave 252.

This is the third radio acquisition that TEAMtalk has made this year. In February, the media group acquired MMC Sport-Redaktion, the largest independent sports radio programmer in Germany, which supplies over 200 radio stations across Germany, Austria and Switzerland.

This was followed by the acquisition in June of Hampson Radio, the leading UK in-store radio broadcaster with customers such as Asda and Moto.

TEAMtalk also produces over 330 hours of sports audio in the UK, including a nine-hour daily radio programme for Ladbrokes.

John EI5FOB

## Marconi Centenary in Newfoundland

As a follow-up to the W1AA/CC event, ARLHS members may also be interested in the following events taking place in Newfoundland to celebrate the Marconi centenary.

1. From Dec. 12 to Feb 12 Canadians may use a special prefix:  
VX for VE's  
VG for VA's  
XJ for VO's  
XK for VY's

2. A special event station will be operating from St. John's, Newfoundland during the month of December --- Call VO1S

A special event certificate will be available for stations working VO1S on Dec. 12th only ...

For those wishing more information, go to <http://www.sonra.ca/>

Terry, VE3DIJ





## What are they on about now?

### A look at the workings of the IRTS committee with John Corless EI7IQ

#### AGM 2002

The November gathering of the IRTS Committee received a progress report from Terry Ebdon, EI9IW, plans for the 2002 AGM and Dinner Dance, to be held along with the very first Mayo Rally, scheduled for March next.

The AGM of the IRTS and the Annual Dinner, are to be hosted by the Mayo Radio Experimenters for the first time. The event will be held earlier in the year, than usual, due to hotel availability issues.

The club chose Knock as venue, because of it's location in the East of the county, to minimise the journey of visitors, and the Belmont Hotel, is located approx 250 mts from the N17.

The nearest rail station is Ballyhaunis, which may be of interest to visitors from the Midlands or Dublin, and the club may run a bus from the station to the rally, if sufficient interest is shown.

The early date for the AGM means that the sitting committee have a shorter "year" in office than normal, especially as the last AGM was held later than usual!

So if you would like to nominate somebody for a position on the Committee, then you should consider making a move sooner rather than later. Of course, in common with everything in life, the old reliable "terms and conditions" apply!

The procedure for nomination is detailed in the Yearbook/Callbook and our President Mr. Moore EI4BZ will expect successful nominees, to take on one or more of the many tasks that the Committee members carry out so willingly, efficiently(!!!) and effectively!

#### Junk e-Mail

Junk e mail has become a scourge in recent times. Personally, I get about one hundred pieces of junk every day, ranging from offers of unlimited wealth and prosperity, to discount loans, not to mention some of the others.

All unsolicited and all unwanted. I find it a real nuisance. Some of the e mail, contains files and attachments that are huge in size and take ages to download. In addition, occasionally they contain viruses.

The situation is now so bad that the contact e mail address of the society has had to be changed, and will be changed frequently, in an effort to avoid getting on these junk-mailing lists.

The theory is that once changed, the old address will "bounce" and the mailing companies won't know the new one for a while.

In addition, the plan is that the new address will be *described*, but not displayed, on the website, so that robot e mail harvesters, won't pick it up.

Readers of the relevant web page(s) will be able to read how the address is constructed, but will be unable to lift it directly off the site.

I hope it works, and that senders of genuine email, won't find it too much of a problem.

I have had two weeks of torture trying to remove a virus, received via junk mail.

I have lost loads of good mail, and the virus has *sent itself* to others through my mailing software.

The very latest version of my Virus protection software is oblivious to the existence of the virus, so much for protection!

I have also changed my own e mail address.

So if you want to send e mail to the IRTS please log on to the website and follow the latest instructions there!

And bear in mind that the email address that works today, may be changed in the morning. This is not a cynical attempt to generate more traffic through the site, but a desperate attempt to solve a major problem.

If you have any better solutions please contact Leslie, the Webmaster, and discuss them with him.

#### Worked All Ireland

Noel Mulvihill EI6HW, has WAI books back in stock.

Activity now appears on 21.317MHz, which is also the US based-*Irish Hour* frequency, in addition to the forty metre net on 7.068MHz.

If band conditions permit, it is likely that participation in the award will continue to grow, if the US crew take to it.

#### Awards

Peter Grant, EI4HX, the Chairperson of the Awards Sub Committee of the IRTS has asked members to think about the awards for next year.

These are the Awards presented at the AGM, and are of course, not the ones competed for.

If you have wondered in the past why some particular amateur or short wave listener, has not received an award, perhaps it is because that no nomination was received, so now is your chance!

Peter and his fellow sub committee members, John McCarthy EI8JA, and Sean Nolan, EI7CD, would be delighted to receive any recommendations you wish to make in this regard.

#### QSL Buro

EI amateurs are pretty active on the bands if the quantity of QSL Cards received by the Society is anything to go by!

It is a good job Pat Fitzpatrick EI2HX is a strong man! Pat brings the incoming cards to the Committee meetings after they have been pre-sorted by Mike McNamara EI2CL, for distribution to the sub managers around the country.

The volume carried to the November meeting would make a decent load for a fork-lift!

Of course many will be going straight back to their port of destination, as cards for non members of the Society are returned undelivered.

Which is a shame, but such is life I suppose!

The December meeting is due to be held a few days before you read this, but after the deadline for publication.

Thanks to all who support the Society by your membership and contributions over the past year.

I hope you have a great Christmas and holiday and that that bands are good for you.

Take care and thanks for reading Echo Ireland.

JC EI7IQ

Dec 10 2001

# South Dublin Radio Club Spring Challenge

The purpose of this challenge is to encourage radio experimenters to be active on the HF bands. The "challenge" is to work as many DXCC countries on as many HF bands as possible during the month of February.

The following are the rules:

The Challenge runs for the full month of February

There are two sections, Open and Restricted:

## Open Section:

One point will be awarded for each DXCC country worked on any HF band (i.e. on 10, 12, 15, 17, 20, 30, 40, 80 or 160 metres). The same DXCC country may be worked on each band, giving one point each time - a maximum of 9 points per DXCC country.

Contacts may be made using any mode. Repeater or satellite contacts do not count.

The winner will be the person with the highest number of points.

In the event of two or more entrants having the same (highest) score, the winner will be the one among them who has the highest total of DXCC countries worked during the month.

## Restricted Section:

Entry will be for one band, CW only.

Any HF band, which may be chosen by the entrant, may be used.

The winner will be the person with the most DXCC countries worked (on CW) on a single band.

In the event of a draw, the winner will be the entrant among those drawing who is deemed by the Committee to have worked the greatest distance in total.

Although open to everyone, the restricted section is designed primarily for licence holders who are restricted to CW on certain bands, or who operate CW only or who use single-band equipment.

All radio experimenters in EI/radio amateurs in GI are eligible to enter.

However, entries will be accepted only from individuals, clubs or groups cannot enter.

All contacts must be made using the challenger's own call sign and in accordance with licence conditions.

Portable or mobile operation (within EI or GI) is permitted.

Contacts must be in normal QSO mode.

Contacts made with stations involved in a contest cannot be counted.

Entries are to consist of log extracts showing, for each QSO for which a point is claimed, the date, time, frequency, mode, station worked and signal report sent/received, together with, if available, the name and QTH of the person contacted. (While the name/QTH information is not essential for all contacts, it should be shown for the majority of contacts).

Separate log sheets are required for each band.

In addition, a list of the total DXCC countries worked, a statement of the total score claimed and a statement to the effect that the rules and spirit of the Challenge were adhered to must be included.

Entries are to be submitted to:

The Secretary, South Dublin Radio Club,  
Ballyroan Community Centre,  
Marian Road, Rathfarnham, Dublin 14.  
(to arrive no later than March 31st)

The results will be announced within two months of the closing date for entries. Trophies will be presented to the section winners.

# Reading the Mail By Michael McNamara, EI2CL

Welcome to compilation #16 of "Reading the Mail" – an account of IRTS QSL Bureau activity from 22 September to 26 November 2001.

During the time small packets of cards (less than 1 kilo) came from EDR, KARS Kuwait, LABRE Fortaleza and Sao Paulo, OVSV Austria, RAQ Canada, RCU Uruguay, SARL and the YO9 buro.

In addition parcels from CRC, Dutch buro, REF and SSA (each 2 kilos), Russia and URE (4 kilos), RSGB (6 kilos), and DARC (10 kilos), kept up the numbers of cards.

While sorting the cards the following were noticed and thought worthy of mention:

A52CO, CW6V, D2BF, E4/G3WQU, EG0XXV, J5Z, M2000Y/MRU79, PP500A, SI6SSA, SI75A, SI900TKM, SU3AM, SU9ZZ, T99ZZ, T00CW, TA2BK, TS7N, TU5IJ, TZ/DF8AN, XU7ABD, ZV500Y, 4X85E, 5T5SV, 5V7VJ, 7P8AA and 7S2O0OM.

Also very obvious was the large number of cards reflecting activity on 50MHz with Europe, Brazil and Uruguay.

For island chasers the following were noticed:

FH/TU5AX, FH/G3SXW, FO/DL1AWL, FW8ZZ, FY/F5KEE, H44MS, DL4VCG/HC8, HH2/F8CUP, HO1A, J28NH/p, MU/OH9MM, OJ0AU, PS2V, T33T, UA1PAC/p, V5/DK6AO, VK9XY, VK9CXW, VP8SDX, ZK2GEO and 3V8SM.

Congratulations to all concerned.

For now, good health and all best wishes for what remains of 2001 and lots of good DX in 2002.

A special thank you is also due to Charlie EI4IS who actually sent me an e-mail to say that he always reads this column.

Thank you very much for the kind wishes.

Michael McNamara, EI2CL.

# Welcome to the World Above 1200MHz

By Dermot EI2AK

In the past number of years, the activity on the microwave bands has increased enormously. This is mainly due to the availability of new and surplus equipment that can be modified relatively easily. It is with this in mind that the Microwave Society was formed.

The aim of the Society is to promote activity on the bands and to give as much information to its members as possible as to where to get equipment and how to carry out any necessary modifications. There is a wealth of information out there for the asking.

At the moment, we are asking a fee to join, just send us a SAE, A4 size with your request for information.

We look forward to hearing from all who are interested and hopefully we will develop into an active, informative and exciting group. My first contacts on 10 GHz back in the 80s were like inventing radio all over again.

My interest in microwaves goes back to the 50s when I acquired a Lighthouse Tube as it was called, but not having any information on it, nothing developed. The next stage was the Klystron which operated on 9 GHz and was difficult to move to 10 GHz. I think what really took my fancy was an article in Short Wave Magazine in April 1971 on the Gunn Effect.

When I saw the transmitter and receiver, Fig. 1, I immediately thought it was an April Fools lark (note date!).

As it turned out, not so and that is what is involved in a 10 GHz Tx/Rx.

Of all the microwave bands, 10 GHz is the easiest to get operational on. You can buy numerous transverters for this band but the simplest approach is to use Solfan Heads, as they are known by.

These devices were used as motion detectors in a security set up.

They have the Gunn Diode in them for

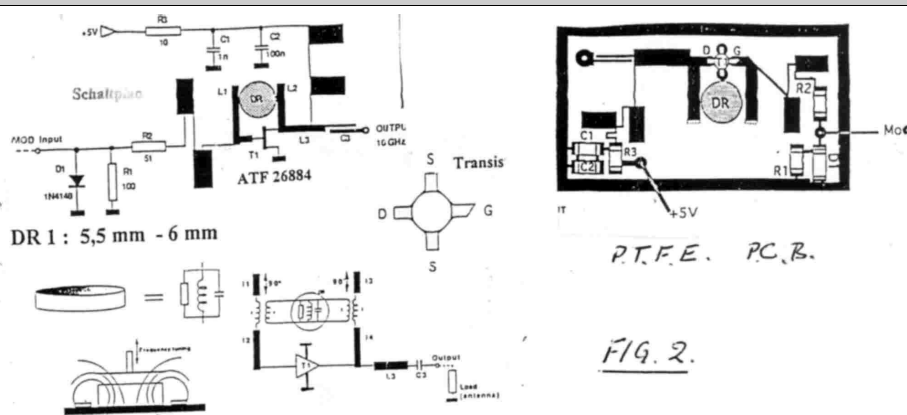


Fig. 1. Schematic diagram of basic transmitter and receiver, using the Gunn effect.

transmitting, giving about 10mW output. You might wonder what you can do with 10mW, but when you consider the gain of a 2 foot dish, 33dB, you are talking over 20w ERP.

At this stage it must be mentioned that microwave radiation is dangerous, especially to the eyes. Never look directly at a source of radiation.

The source of Solfan Heads is drying up now but is replaced by a much better device called the Dielectric Resonator.

The DR is a ceramic cylinder that works as a resonant circuit with a quality factor of about 5000 at 10GHz, which is similar to that of a crystal at frequencies below 100MHz.

Looking at Fig. 2, the resonator is placed close to the lines of the stripline circuit, the coupling being essentially inductive. Frequency tuning is achieved by adjusting the position of a metal disc above the resonator.

Oscillation only occurs at the resonant frequency of the DR.

Fig. 2 is the complete circuit of the oscillator and it produces an output of 30-40mW.

The PCB must be PTFE dielectric

Hopefully, these boards will be available in the near future.

The circuit can be used as an FM trans-

mitter or as a television transmitter. Full details of both coming up soon.

So, let's hope this has given you food for thought to begin with and our next problem will be QRM on 10GHz with all the activity.

How to hear or see you soon on 10GHz.  
73

Dermot EI2AK.

Dermot Cowley EI2AK,  
Fieldstown,  
Monasterboice,  
Drogheda,  
Co. Louth.

041-9833809  
Dermotei2ak@hotmail.com.

## Irish Radio Transmitters Society Book Sales

Books, Maps, Logbooks etc.

Peter Grant, EI4HX  
37 Glenmore Park, Dundalk,  
Co. Louth  
Telephone 042-9332641

## Video Library

Selection of radio related  
videos available on loan

Jim Ryan, EI3DP,  
11 Knockgriffin, Middleton,  
Co. Cork.  
Telephone 021-4632365

Mayo Radio Experimenters Network

# Mayo Rally 2002

Mayo Radio Experimenters Network

Ireland's Award winning club  
are pleased to announce their first ever

## Rally

in the

## Belmont Hotel, Knock

on

## Sunday March 3rd 2002



Practical  
**wireless**

**to coincide with the IRTS AGM and Dinner Dance.**

The Dinner Dance will be held on the Saturday night and the  
Rally and AGM will be held on the Sunday.



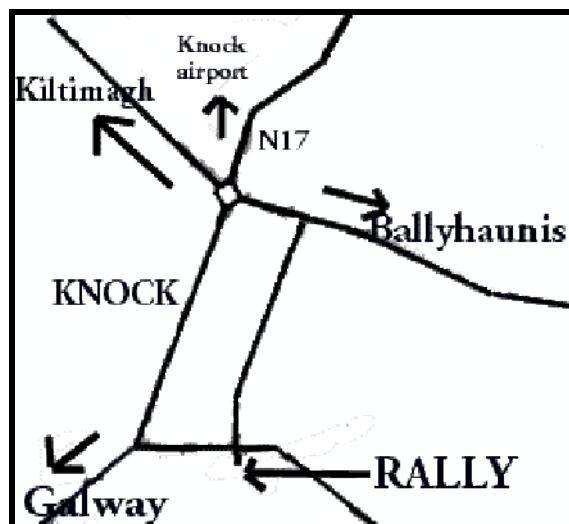
For further details visit: [www.mayoren.net](http://www.mayoren.net)  
Traders contact EI9JA QTHR or e-mail [rally@mayoren.net](mailto:rally@mayoren.net)

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